What is claimed is:

1. A developing unit of a liquid electrophotographic image forming apparatus, the developing unit comprising:

a developing roller adapted to supply ink to a photosensitive medium on which an electrostatic latent image is formed, to develop the electrostatic latent image;

an ink storage unit adapted to store ink to be supplied to the developing roller; and

an ink cartridge adapted to be installed in the ink storage unit, and to be opened or closed and to supply ink to the ink storage unit;

wherein the ink cartridge comprises a cartridge sleeve rotatably installed, and a cartridge slider, which slides by rotation of the cartridge sleeve to open the ink cartridge.

2. The developing unit of claim 1, wherein a rotation shaft is provided in the cartridge sleeve, a first screw portion being formed on an end of the rotation shaft, and a second screw portion corresponding to the first screw portion is formed at one side of the cartridge slider so that the cartridge slider slides by rotation of the rotation shaft.

3. The developing unit of claim 1, wherein an elastic member is installed between the cartridge slider and a developing container and applies an elastic force so that the cartridge slider is pushed toward the cartridge sleeve.

4. The developing unit of claim 3, wherein at least one cartridge coupling is formed at one side of the cartridge slider in which a second screw portion is formed, and a guide coupling in which a coupling groove into which the cartridge coupling is inserted, is provided between the cartridge slider and the elastic member.

5. The developing unit of claim 1, wherein a rotation groove is formed on an outer circumference of the cartridge sleeve, and a jaw corresponding to the rotation groove is formed in a developing container that forms outer walls of the developing unit.

6. The developing unit of claim 1, wherein a knob unit is provided on an end of the cartridge sleeve protruding from an outside of a developing container so that the cartridge sleeve is adapted to be rotated from the outside of the developing container.

7. The developing unit of claim 1, further comprising an ink sealing ring which adapted to prevent leakage of ink when the ink cartridge is closed is provided on a surface where the cartridge sleeve contacts the cartridge slider.

8. The developing unit of claim 1, wherein a concentration of ink is more than about 3% solid.

9. The developing unit of claim 1, wherein a concentration of ink is from about 10 to about 20% solid.

10. The developing unit of claim 1, wherein an inclined angle at insides of the cartridge sleeve and the cartridge slider is greater than about 7 degrees.